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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/080,800	02/22/2002	Didier Decker	TK3720USNA	9863

23906 7590 03/17/2004

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EXAMINER	
PIERCE, JEREMY R	

ART UNIT	PAPER NUMBER
1771	

DATE MAILED: 03/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/080,800	DECKER ET AL.	
	Examiner	Art Unit	
	Jeremy R. Pierce	1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 January 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5 and 8* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5 and 8* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *1/20/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Applicant's amendment filed on January 20, 2004 has been entered. Claim 1 has been amended. Claims 6 and 7 have been cancelled. Claims 1-5 and 8 are currently pending. Applicant's incorporation of claim 7 into claim 1 renders moot the 35 USC 102 rejection set forth in section 2 of the last Office Action.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 3, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marshall (U.S. Patent No. 5,851,936).

Marshall discloses a flash spun film-fibril sheet having a basis weight between 30 and 100 grams per square meter and having opacity greater than 85% (column 1, lines 55-60). The sheet is point bonded (column 6, lines 16-18) and the sheet may be bonded on both sides (column 3, line 21). Marshall discloses that mechanical softening may be performed after bonding to remove harshness that may have been introduced during the bonding (column 3, lines 30-32). Marshall discloses the elongation to be over 15% in both the machine and cross machine directions (column 5, Table I). Marshall does not disclose the claimed tensile strength, nail tear strength, and Mullenburst bursting strength. However, increasing the strength of the sheet material

would be a matter of optimizing a result effective variable. Marshall discloses that adjusting the quenching of the polymer contributes to the strength of the sheet material (column 2, lines 60-63). It would have been obvious to one having ordinary skill in the art to increase the strength of the sheet material of Marshall to better suit it for its intended use by adjusting the quenching of the polymer or overall thickness and weight of the sheet material, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). Marshall teaches using a ribbed point-bonding pattern (column 3, lines 26-30). With regard to claim 3, Marshall discloses hydrostatic head values greater than 150 cm (column 5, Table I).

4. Claims 2, 4, and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marshall in view of Miller (U.S. Patent No. 4,091,137).

Marshall does not disclose the number of point bonds per centimeter or the percent area encompassed by the point bonds. However, having the bonds cover between 13 and 17% of the sheet with between 60 and 70 bond points per square centimeter is known in the art of film-fibril sheets, as shown by Miller (Abstract). Miller teaches such bonding offers uniform visual appearance (column 3, lines 9-10), improved surface stability (column 5, lines 66-67), and a higher hydrostatic head (column 3, lines 56-62). It would have been obvious to one having ordinary skill in the art to provide between 60 and 70 bond points per square centimeter with a bond area between 13 and 17% to the sheet of Marshall in order to provide a film-fibril sheet with

sufficient bonding strength to hold together and the improved properties disclosed by Miller.

Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 1-5 and 8 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 8-24 of copending Application No. 10/080,802. Although the conflicting claims are not identical, they are not patentably distinct from each other because both sets of claims are directed to a film-fibril sheet that is point bonded to a similar degree on both sides, but not to the point of translucency.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Response to Arguments

7. Applicant's arguments filed January 20, 2004 have been fully considered but they are not persuasive.

8. Applicant argues that Marshall teaches a hard structure area and does not teach mechanically softening the film-fibril structure. However, Marshall does disclose that mechanical softening is used following point bonding to remove harshness introduced from bonding (column 3, lines 30-32). Although the examples in Marshall show resulting property values without mechanical softening the film-fibril structure, this does not mean that Marshall teaches away from mechanical softening. Marshall is only showing the resulting properties are measured before mechanical softening takes place.

9. Applicant argues that Marshall fails to disclose rib x rib bonding by pointing out that Marshall only teach rib x bar point bonding. However, Applicant fails to state what the difference between rib x rib bonding and rib x bar bonding is. Marshall discloses the bonding is done with a "rib and bar pattern." Marshall does not state that one side is rib bonded and the other side is bar bonded. A "bar" is generally thought of as complimentary to a "rib" because a rib engages into a bar. Since Marshall discloses that the film-fibril may be point bonded with a rib and bar pattern, and that both sides may be subject to thermal bonding (column 3, lines 20-22), the Examiner must assume that the resulting product is bonded with a rib pattern on both sides. Applicant has failed to state what the structural difference is between the Marshall patent and the present invention.

10. Applicant argues that the Examiner fails to suggest what variable of Marshall should be adjusted and in what manner, to obtain film-fibril sheets with the property limitations of claim 1. However, the Examiner stated in the last Office Action that the result effective variable, as disclosed by Marshall, is the orientation of the polymer

molecule (column 2, lines 60-63). Increased orientation in a polymer molecule produces stronger polymer. Additionally, other known variables are commonly adjusted in the art to increase strength, including thickness and weight of the material, as set forth above.

11. Applicant argues that the highest tensile strength disclosed by Marshall is 67.4 N/inch, and that mechanical softening would further reduce the tensile strength. However, the Marshall reference is not limited to the embodiments of the examples. A person skilled in the art would know how to make a film-fibril sheet stronger by adjusting the result effective variables set forth above in the rejection. Absent the finding of unexpected results when performing those adjustments, increasing the strength of the Marshall sheet is obvious.

12. Applicant argues that the tensile strength and other claimed parameters are unexpectedly improved by rib x rib point bonding, and conducting that bonding under unusually mild conditions. However, Applicant has not shown how rib x rib point bonding is different from the bonding in Marshall. Additionally, Applicant has not shown that the claimed parameters would not result by adjusting the result effective variables set forth in the rejection above. Finally, in response to Applicant's argument about bonding under unusually mild conditions, it is noted that the features upon which applicant relies (i.e., using a softer backup roll) are not recited in the rejected claims. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

13. Applicant argues that one principal object of Marshall is to obtain sheets having high opacity; whereas Miller is directed at forming sheets having high optical transmission. Applicant asserts that the modifications suggested by Miller would destroy the object of Marshall. However, Miller is not directed to making the entire film-fibril sheet transparent. Miller only teaches that the embossed regions have an optical transmission of at least 50% (column 4, lines 45-46). Since Miller teaches that only 3 to 25% of the sheet is point bonded (Abstract), only 3 to 25% of the sheet would have at least 50% translucency. Therefore, any area not subject to point bonding would be completely opaque, and even those areas that are bonded are only required to be 50% translucent. This is well within the parameters of 85% opacity set forth by Marshall. Additionally, one important resulting feature of Miller is uniformity in visual appearance (column 3, lines 8-12). This would not be achieved by creating a sheet with high optical transmission, as asserted by Applicant.

Conclusion

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeremy R. Pierce whose telephone number is (571) 272-1479. The examiner can normally be reached on Monday-Thursday 7-4:30 and alternate Fridays 7-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JRP

JRP

ELIZABETH M. COLE
PRIMARY EXAMINER